



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,711	10/29/2003	Ceehan Tian	064731.0378	5574
5073	7590	06/27/2008		
BAKER BOTTS LLP, 2001 ROSS AVENUE SUITE 600 DALLAS, TX 75201-2980			EXAMINER	
			BELLO, AGUSTIN	
			ART UNIT	PAPER NUMBER
			2613	
NOTIFICATION DATE		DELIVERY MODE		
06/27/2008		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ptomail1@bakerbotts.com
glenda.orrantia@bakerbotts.com



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/695,711

Filing Date: October 29, 2003

Appellant(s): TIAN ET AL.

Chad C. Walters
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 04/15/08 appealing from the Office action mailed 11/19/07.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

US 20030025961 A1	Way, Winston	2-2003
US 6868201 B1	Johnson; Princy et al.	3-2005

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless —

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-3, 5-10, 12-14, 16-18, and 20-46 are rejected under 35 U.S.C. 102(e) as being anticipated by Way (U.S. Patent Application Publication No. 2003/0025961).

Regarding claim 1, 9, 12, 13, 16, 23, 30, 32, and 33, Way teaches an optical ring operable to communicate optical traffic (reference numeral 12 in Figure 6); a plurality of nodes (reference numeral 24, 26 in Figure 6) coupled to the optical ring, each node operable to passively add and drop one or more traffic streams to and from the optical ring, each traffic stream comprising at least one channel; and the plurality of nodes comprising: a hub node (reference numeral 24 in Figure 6) operable to selectively pass or terminate a plurality of individual sub-bands of the optical traffic; and a plurality of sub-band nodes (reference numeral 26 in Figure 6) each operable to terminate a respective sub-band of the optical traffic.

Regarding claims 2, 17, 24, Way teaches that the plurality of nodes further comprises a coupler node (i.e. any one of nodes 26 or the bottom-most node in Figure 6) operable to drop and continue optical traffic passing through the coupler node.

Regarding claims 3, 10, 14, 18, 25, 31, 34, 38, 44, Way teaches that the hub node comprises: a demultiplexer (i.e. “Three-color Splitters” of Figure 13) operable to demultiplex the optical traffic into its constituent sub-bands; a plurality of switches (i.e. the “1x1” switches of Figure 13) each operable to pass or terminate a respective sub-band; and a multiplexer (i.e. “Fiber Coupler” of Figure 13) operable to multiplex each sub-band passed at the plurality of switches for communication on the optical ring.

Regarding claims 5, 20, 26, Way teaches that the plurality of sub-band nodes each comprise a sub-band filter operable to block optical traffic in a respective sub-band (paragraph [0087]).

Regarding claims 6, 21, 27, Way teaches a combination sub-band node (Figure 20C) operable to terminate a plurality of sub-bands of the optical traffic.

Regarding claims 7, 22, 28, Way teaches that the combination sub-node comprises a plurality of cascaded sub-band filters (reference numeral 154 in Figure 20C) each operable to block optical traffic in a respective sub-band.

Regarding claims 8, 29, Way teaches an optical ring operable to communicate optical traffic (reference numeral 12 in Figure 6); a plurality of nodes coupled to the optical ring (reference numeral 24, 26 in Figure 6), each node comprising at least one transport element operable to passively add and drop one or more traffic streams to and from the optical ring, each traffic stream comprising at least one channel; and the plurality of nodes comprising a combination node (Figure 23), the combination node comprising: a coupler node transport element (reference numeral 120 in Figure 23) operable to drop and continue optical traffic passing through the coupler node transport element; and a hub node transport element (i.e.

“Circulator” and reference numeral 166 in Figure 23) cascaded with the coupler node transport element, the hub node transport element operable to selectively pass (i.e. all wavelengths not reflected by the tunable filter) or terminate (i.e. via reference numeral 166 in Figure 23) a plurality of individual sub-bands of the optical traffic.

Regarding claims 35 and 41, Way teaches an optical ring (i.e. “Ring” in Figure 19) operable to communicate optical traffic; a plurality of nodes (i.e. a node for each of the three rings) coupled to the optical ring, each node operable to passively add and drop one or more traffic streams to and from the optical ring, each traffic stream comprising at least one channel; the plurality of nodes comprising: a plurality of hub nodes (i.e. a hub node for each of the three rings) operable to selectively pass or terminate a plurality of individual sub-bands of the optical traffic; and a plurality of sub-band nodes (reference numeral 26 in Figure 6) each operable to terminate a respective sub-band of the optical traffic; wherein the plurality of hub nodes form a plurality of photonic domains (i.e. each ring) each operable to communicate different traffic streams in the same sub-bands without interference (paragraph [0071]).

Regarding claims 36-37 and 42-43, Way teaches that the plurality of hub nodes comprises two and three photonic domains (Figure 19).

Regarding claims 39 and 45, Way teaches that the plurality of switches are reconfigurable to provide optical shared path protection in the event of an error in the network (paragraph [0070]).

Regarding claims 40 and 46, Way teaches that the error comprises a fiber cut (as noted by “X” in the Figures).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4, 11, 15, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Way in view of Johnson (U.S. Patent No. 6,868,201).

Regarding claim 4, 11, 15, 19, Way differs from the claimed invention in that Way fails to specifically teach that the demultiplexer and the multiplexer comprise array waveguides. However, Johnson teaches that the demultiplexers and multiplexers comprising array waveguides are well known in the art (column 8 lines 6-16). One skilled in the art would have been motivated to employ demultiplexers and multiplexers comprising array waveguides in the hub node of Way so that different band can be multiplexed and demultiplexed by the same device (column 8 lines 13-16 of Johnson). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to include demultiplexers and multiplexers comprising array waveguides in the hub node of Way.

(10) Response to Argument

1. The Examiner's Rejections of Claims 35-46 are Proper

Addressing Appellant's first argument that the prior art cited by the examiner fails to provide disclosure of a plurality of hub nodes on the same ring, the examiner first notes that the claim language does not require a plurality of hub nodes on the same ring. In fact, the words "same ring," or even the term "same" fail to appear in the claim language. Rather, the claim

language simply requires an optical network that *comprises* an optical ring operable to communicate optical traffic, with absolutely no indication that the claimed optical ring is the only optical ring in the optical network, or that the all of the claimed plurality of nodes are coupled to the only claimed optical ring. With Appellant's use of the terms "optical network comprising," the only positive conclusion that can be drawn from the claim language is that at least one, but maybe more optical rings exist in the optical network. The fact that the claim language is written in this broad manner allowed the examiner to apply the cited prior art to Way as disclosing the claimed invention.

More specifically, Way discloses an optical network (Figure 19) that comprises not one, but three optical rings. Each of these optical rings are coupled to one another via ring specific hub nodes, each consisting of a demultiplexer (reference numeral 146 in Figure 19), a 1X1 switch, and a fiber coupler (reference numeral 148 in Figure 19). As a result, Way discloses three optical rings and three hub nodes, with each ring interconnected to the other rings via their respective hub node. Given that Way's hub nodes act as an interconnection means between the rings of the optical network, each node of the plurality of nodes is coupled to every ring in the optical network. As such, regardless of the number of rings in the network, it can be said that every one of Way's plurality of hub nodes are coupled to an optical ring. In fact, each single ring has at least three hub nodes coupled to it, namely a first hub node that physically resides on the ring, and two other hub nodes that are coupled to the ring via connection to the ring-residing hub node. Given the world of difference between arguing that there are a plurality of nodes "on the same ring" and claim language that simply requires a plurality of nodes *coupled* to an optical ring, the examiner maintains that the cited prior art meets the limitations of the claimed

invention. The examiner further contends that the claim language meets the argued but not claimed limitation that a plurality of nodes are coupled to the same ring by virtue of the fact that in Way, every hub node is coupled to every ring in the network, thereby providing three hub nodes coupled to every single ring as discussed above.

Furthermore, each of these 3 interconnected hub nodes is at least operable to passively add and drop one or more traffic streams to and from the optical ring being that no physical difference exists between the claimed plurality of nodes and the hub nodes disclosed by Way. As the BPAI will surely appreciate, it has been judicially determined that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In this case the examiner contends that Way's nodes are capable of performing the intended use, namely passively adding and dropping one or more traffic streams to and from the optical ring. In fact, Way specifically shows that the hub nodes of Figure 19 passively add and drop one or more traffic streams to and from the optical ring. For example, leftmost demultiplexer 146 of the hub node for "Ring #1" demultiplexes wavelengths from the ring and drops one of the wavelengths to fiber coupler 148 of the hub node for "Ring #3" and another wavelength to fiber coupler 148 of the hub node for "Ring #2." Similarly, fiber coupler 148 of the hub node for "Ring #1" accepts two wavelengths dropped from "Ring #2" and "Ring #3" which are to be added to the pass-through wavelength of "Ring #1" and transported around "Ring #1." Given that every hub node of Figure 19 functions in the same manner as described above, it can be said that each node of the plurality of nodes coupled to the ring passively adds and drops one or more

traffic streams to and from the optical ring, even in the argued but not claimed scenario where only a single ring exists and all the nodes are coupled to the single ring.

As to Appellant's argument that Way's hub nodes do not form a plurality of photonic domains each operable to communicate different traffic streams in the same sub-bands without interference, the examiner disagrees and contends that Way does in fact teach these limitations. It's hard to imagine that Way's hub nodes fail to form a plurality of photonic domains considering that each hub node, i.e. the demultiplexer (reference numeral 146 in Figure 19), the 1X1 switch, and the fiber coupler (reference numeral 148 in Figure 19), is an integral part of each distinct ring. In fact, the examiner contends that Way discloses at least three photonic domains - a first photonic domain formed by "Ring #1" and the leftmost hub node, a second photonic domain formed by "Ring #2" and the rightmost hub node, and a third photonic domain formed by "Ring #3" and the lowermost hub node. To argue that Way's three separate rings don't form photonic domains is like arguing that each ring of a three-ring circus is not its own domain. Of course the opposite is true, with horses performing tricks in one ring under the control of a ring leader, while lions perform in another of the rings under control of another ring leader, and further still elephants perform in the third of the rings under control of their own leader. Similarly, each one of Way's rings independently routes traffic, adds traffic, and drops traffic to and from clients attached to that ring. In other words, the elements within or residing on each ring performs their own set of tricks on the optical signals traversing the ring independent of the tricks that routing elements residing on other rings perform on the optical signals. Being that the hub nodes form an integral part of the ring, and with each ring being its own domain as explained above, the examiner contends that Way's hub nodes do indeed form a

plurality of photonic domains by virtue of the fact that each hub node resides on a ring that is independent and distinct from the other rings.

Furthermore, Way clearly discloses that each of the domains communicates different traffic streams (i.e. 62, 64, and 66 in Figure 13) in the same sub-bands (i.e. as indicated by the combination of all signals in the “62” sub-band at the fiber coupler of “Ring #1”) without interference. Way also specifically discloses that:

“As illustrated, 1X3 couplers are used in each ring 54, 56 and 58 to combine the same band of signals from the three different rings.”

That Way teaches this concept in connection with a separate figure than that relied upon by the examiner to form the basis of the rejection should be of little consequence given that the physical structure of Figures 13 and 19 are the same. Moreover, it is apparent from Way that the different traffic streams in the same subbands can be communicated and combined without interference given that it is highly unlikely that the same subbands would be combined by Way only to be allowed to interfere with one another and essentially destroy or diminish each other. This is especially true considering that the optical signals are destined for subscribers where a signal diminished or destroyed by interference is of little use. Moreover, it is important to remember that each ring carries signals 62, 64, and 66 in each separate ring, thereby providing further grounds for anticipation of the claimed invention in that different traffic streams 62, 64, and 66 in each ring are communicated in the same sub-bands, i.e. subband signal 62 in each ring for example, without interference, i.e. the signals are communicated on different rings and are therefore not given the opportunity to interfere with one another. These points along with the

fact that no physical difference between the claimed hub nodes and photonic domains is claimed by Appellant is enough for the examiner to consider Way as anticipating Appellant's claimed invention as it pertains to the claimed hub nodes, photonic domains, and communication of different traffic streams in the same sub-bands without interference.

Way further discloses that each ring has other nodes coupled to it besides the hub nodes shown in Figure 19, therefore meeting Appellant's claim to a plurality of nodes comprised of hub nodes, as discussed above, and sub-band nodes as discussed below. Specifically, Way discloses the use of transmission and reception nodes 26 of Figure 6 coupled to each ring, which the examiner, as clearly noted in the office action, contends anticipate Appellant's sub-band nodes. Given that the examiner has specifically identified Way's sub-band nodes and the hub nodes in the office action as anticipating Appellant's sub-band nodes and hub nodes, Appellant's argument that the examiner has failed to identify which of Way's components correspond to the claimed nodes is baseless. Furthermore, Way's subband nodes 26 in Figure 6 are clearly capable of adding and dropping traffic from the same ring. For example, each of Way's subband nodes includes transmission means, multiplexing means, and fiber coupling means so that signals may be added to the ring. Similarly, each of Way's subband nodes includes fiber decoupling means, demultiplexing means, and receiver means so that signals may be dropped from the same ring. Regardless, as noted above, the claim language does not require that the signals be added and dropped from the same ring, only that the signals be added and dropped from at least one ring.

In concluding the rebuttal of Appellant's first argument, the examiner would like to reiterate that although Appellant asserts that the claim language requires a plurality of hub nodes "on the same ring" the claim language is not quite as specific. Furthermore, as argued above,

Way clearly discloses a plurality of hub nodes coupled to a ring forming a plurality of photonic domains each operable to communicate different traffic streams in the same sub-bands without interference. In fact, given the broadest reasonable interpretation of Appellant's argued but not claimed limitation to a plurality of hub nodes on the same ring, Way, in certain instances also meets this limitation. Finally, the examiner notes that the rejection of claims 35 and 41 was formulated based on Figures 6 for disclosure of the claimed subband nodes, Figure 13 for disclosure of the claimed non-interfering communication traffic streams in the same subbands, and Figure 19 as disclosing the plurality of hub nodes and plurality of photonic domains. However, each of these figures is related to an optical ring network and more particularly to a plurality of interconnected optical ring networks, thereby allowing relevant parts from each to be cited as anticipating the claimed invention without departing from the spirit or scope of Way's invention.

2. The Examiner's Rejection of Claims 1-34 are Proper

Applicant begins by arguing that the hub node cited by the examiner (reference numeral 24 in Figure 6) is not operable to both passively add and drop one or more traffic streams and selectively pass or terminate a plurality of individual subbands. However, the examiner contends that the claim language does not require that the hub node be operable to perform all of these function.

To explain, the claim language first recites a plurality of nodes coupled to the optical ring with each node operable to passively add and drop one or more traffic streams to an from the optical ring. The claim language then recites that the plurality of hub nodes comprises a hub node operable to selectively pass or terminate a plurality of individual sub-bands of the optical

traffic, and a plurality of subband nodes each operable to terminate a respective subband of the optical traffic. However, although Appellant asserts that the claimed hub node and subband nodes are subsets of the claimed “plurality of nodes,” the possibility exists that the first claimed plurality of nodes is distinct from the hub node and the plurality of subband nodes. This interpretation of the claim language is possible due to applicant’s use of the open-ended term “comprising” to describe the plurality of nodes. For example, it is possible that there are a total of six nodes coupled to the ring where three of the six nodes are operable to passively add and drop one or more traffic streams to and from the optical ring, two of the six nodes are sub-band nodes operable to terminate a respective subband of the optical traffic, and one the six nodes is a hub node operable to selectively pass or terminate a plurality of individual subbands of the optical traffic. In other words, since Appellant recites “and the plurality of nodes comprising” it is possible that the plurality of nodes operable to passively add and drop one or more traffic streams to and from the optical ring is simply a subset of the total number of the plurality of nodes, with a hub node and a plurality of subband nodes representing the other subsets. In fact, it has been judicially determined that the term “comprising” is inclusive or open-ended and does not exclude additional, unrecited elements or method steps. See, e.g., *Mars Inc. v. H.J. Heinz Co.*, 377 F.3d 1369, 1376, 71 USPQ2d 1837, 1843 (Fed. Cir. 2004). Given Appellant’s use of the open-ended term comprising to describe the plurality of nodes, it is not absolutely necessary that the claimed plurality of nodes operable to passively add and drop one or more traffic streams to and from the optical ring be one and the same as the hub node and the plurality of subband nodes. As noted above, it may be that the hub node and the subband nodes do not have the

ability to passively add and drop one or more traffic streams to an from the optical ring and still be a subset of the claimed "plurality of nodes."

Regardless of whether or not the examiner's interpretation of the open-ended term "comprising" is correct, the examiner contends that Way's hub node continues to anticipate the claimed node that is operable to passively add and drop one or more traffic streams and selectively pass or terminate a plurality of individual subbands. Specifically and as noted by Appellant, Way's hub node comprises a switch that either passes or stops traffic communicated on the rings depending on whether switches 22 are opened or closed. Given the broadest reasonable interpretation, Way's hub node can be considered as adding an optical signal to the left side of the ring from the right side of the ring when switch 22 is transitioning from an open position to a closed position. Similarly, the hub node can be considered as dropping an optical signal at the left side of the ring when the switch 22 transitions from a closed position to an open position. Furthermore, Way's hub node selectively passes or terminates a plurality of individual subbands by virtue of the switching operation. In a closed position, the optical signals are passed form the right side of the ring to the left side of the ring. In an open position, the optical signals are terminated or prevented from propagating from the right side of the ring to the left side. Given the above, it can broadly be said that Way's hub node is operable to passively add and drop one or more traffic streams and selectively pass or terminate a plurality of individual subbands.

Next, Appellant argues that Way's nodes 26 of Figure 6 cited by the examiner as disclosing the claimed subband nodes are not operable to terminate a respective subband of optical traffic. However, the examiner disagrees and contends that Way's nodes do exactly what

is claimed. For example, each node 26 in Figure 6 terminates traffic by first coupling the optical signal from the ring to associated optical receivers where the optical signals are received and thereby terminated. In other words, the optical signals cease being optical signals upon reception by the receivers of nodes 26 in Figure 6. Thus, the optical signal is terminated and an electrical signal is presumably initiated. Furthermore, each of Way's subband nodes also drops and adds one or more traffic strings to and from the ring via the fiber couplers, multiplexer/demultiplexers, and transmitter/receivers. Moreover, Appellant's assertion that reception of an optical signal in Way cannot suffice as termination of that optical signal given that the optical signal also continues along the ring is irrelevant being that Appellant's claim fails to exclude this possibility, although it is certainly not clear that the system of Way functions in this manner. As noted above, Way certainly teaches termination of an optical signal, at least via reception of that optical signal at a receiver. Pulling all the features of Way's subband nodes together provides clear indications that not only are Way's subband nodes operable to terminate a respective subband of optical traffic, they also drop and add one or more traffic strings to and from the ring.

Turning now to Appellant's argument that Way's Figure 23 fails to teach the claimed hub node transport element of claims 8-11 and 29-31, the examiner first notes that Appellant's interpretation of the "Main Path of a Ring" as continuing *all* the ring traffic despite the dropping of the traffic at the couplers is completely wrong. In fact, Way specifically discloses that:

As illustrated in FIG. 23, the drop ports of broadband couplers 120 can each include a wavelength-dependent tunable filter 120. Each tunable filter 120 reflects non-selected wavelengths to a through port for one cascaded three-port optical add/drop filter to an adjacent cascaded three-port optical add/drop filter.

In other words, if a wavelength traversing the main path of a ring is “non-selected” it will be reflected back onto the ring. Conversely, if the wavelength is selected it will not be reflected and will then be dropped to the cascaded circulators of Figure 23. Another glaring contradiction between how Appellant contends broadband coupler 120 functions and how Way discloses that it functions is the fact that Way has labeled the broadband coupler as been a “100% Optical Drop” with all λ ’s apparently being input to a first port of the first circulator and output to a second port of the optical circulator towards filter 166. Coupling what is shown in Figure 23 with the fact that Way says that the broadband couplers 120 *“can”* each include a wavelength dependent filter, it becomes apparent that Appellant’s interpretation of how the broadband coupler functions is not even supported by Way since the broadband coupler either performs a 100% optical drop or includes a wavelength-dependent tunable filter that reflected only non-selected wavelengths. There is absolutely no disclosure in Way of the broadband coupler dropping “all the ring traffic” and allowing the traffic to still continue on the ring as asserted by Appellant.

As to Appellant’s assertion that the cited reference numeral 166 in Figure 23 fails to meet the claimed hub node transport element ability to selectively pass or terminate from continuing on the optical ring a plurality of individual subbands of the optical traffic, the examiner disagrees and further notes that the examiner cited the circulator *and* the element 166 in Figure 23 as meeting these limitations. The circulator and element 166 in Figure 23 selectively pass a plurality of individual sub-bands of the optical traffic in that the circulator and element 166 combination selectively passes all of the λ ’s except $\lambda 1$ to the next cascaded circulator and element 166. Furthermore, $\lambda 1$ is terminated by element 166 by virtue of the fact that element 166 is a tunable filter and receiver. Thus, $\lambda 1$ ceases to be an optical signal upon reception by

receiver 1 and is therefore terminated as an optical signal. Even if BPAI is not convinced that the circulator and receiver noted by the examiner terminate the subbands of the optical traffic, the examiner further notes that it is not entirely necessary that the hub node transport element include this functionality since Appellant claims that the hub node transport element selectively passes *or* terminates from continuing on the optical ring a plurality of individual subbands of the optical traffic. Thus, the Way's hub node transport element need only perform one of selectively passing or terminating optical signal to meet the limitations of the claimed invention.

Finally, Appellant argues that Way fails to disclose each and every element of claims 12-15 and 32-34. However, the examiner disagrees and first notes that a "hub node" is never claimed in either of claims 12 or 32. Rather, claims 12 and 32 only recite a "hub node transport element" which apparently is an element within the hub node. Regardless, as noted above, the examiner contends that Way's hub node continues to anticipate the claimed node that is operable to passively add and drop one or more traffic streams *and* selectively pass or terminate a plurality of individual subbands. Specifically and as noted by Appellant, Way's hub node comprises a switch that either passes or stops traffic communicated on the rings depending on whether switches 22 are opened or closed. Given the broadest reasonable interpretation, Way's hub node can be considered as adding an optical signal to the left side of the ring from the right side of the ring when switch 22 is transitioning from an open position to a closed position. Similarly, the hub node can be considered as dropping an optical signal at the left side of the ring when the switch 22 transitions from a closed position to an open position. Furthermore, Way's hub node selectively passes or terminates a plurality of individual subbands by virtue of the switching operation. In a closed position, the optical signals are passed form the right side of the ring to

Art Unit: 2613

the left side of the ring. In an open position, the optical signals are terminated or prevented from propagating from the right side of the ring to the left side. Given the above, it can broadly be said that Way's hub node is operable to passively add and drop one or more traffic streams and selectively pass or terminate a plurality of individual subbands.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Agustin Bello/

Primary Examiner, Art Unit 2613

Conferees:

/Jason Chan/

Supervisory Patent Examiner, Art Unit 2613

/Kenneth N Vanderpuye/

Supervisory Patent Examiner, Art Unit 2613